

**ABSTRACT**

To find the deterioration degree of a heater that heats a furnace. The present invention includes: a current detector 21 that detects a level of a  
5 current flowing through a heater 7 that is heated based on a commercial power source 1; a voltage detector 20 that detects a level of a voltage applied to the heater 7; a temperature detector 22 that detects a temperature of the heater 7; a table memory 14 on which a temperature coefficient of resistance for use in calculation of a resistance of the heater 7 at a time of manufacture  
10 is stored; and a CPU 17A that calculates a resistance of the heater 7 at an inspection time based on respective detection results by the voltage detector 20 and the current detector 21 and calculates the resistance of the heater 7 at a reference time based on a detection result by the temperature detector 22 and the temperature coefficient of resistance stored on the table memory 14,  
15 thereby finding the deterioration degree of the heater 7 based on the resistance of the heater 7 at the inspection time and the resistance of the heater 7 at the reference time.